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(54) **ULTRASONIC WAVE PROJECTION WEDGE OF
ULTRASONIC APPLIED MEASURING
INSTRUMENT**

2nd member 30, i.e. slanting surfaces of the contacting
saw-tooth grooves 22 and 32 on the basis of the Snell's
law.

(57) Abstract:

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PURPOSE: To determine the refraction of an ultrasonic wave on the boundary surface of a body to be measured by the Snell's law by bringing saw-tooth grooves of the 1st member and the 2nd member which differ in sound velocity into close contact with each other and thus forming one flat plate, and installing an ultrasonic oscillator on one flank and the body to be measured on the opposite flank.

CONSTITUTION: The 1st member 20 has a flat surface as its one flank 21 and saw-tooth grooves 22 in the opposite flank, and the 2nd member 30 has saw-tooth grooves 32 in one flank corresponding to the saw-tooth grooves 22 of the 1st member 20 and a flat surface at the opposite surface. The 1st member 20 and the 2nd member 30 are made of materials which differ in sound velocity, and the saw-tooth waves of the both are brought into close contact with each other to form one flat plate. Consequently, an ultrasonic wave transmitted by the ultrasonic wave oscillator 4 installed on the flat surface 21 of the 1st member 20 is refracted by the boundary surface between the 1st member 20 and the

